

WHAT IS CLAIMED IS:

1. A glass substrate of which the outer periphery portion is unprocessed.

2. A glass substrate of which the outer periphery portion is unprocessed having the center of gravity as the center of rotation.

3. The glass substrate of which the outer periphery portion is unprocessed according to Claim 1, wherein the outer periphery edge surface is a free-form surface having a surface coarseness 2.5 nm, or less, and having a maximum surface coarseness of 150 nm, or less.

4. The glass substrate of which the outer periphery portion is unprocessed according to Claim 1, wherein E/ρ (E is the Young's modulus (GPa) and ρ is the specific gravity (g/cm^3)) is 27 to 52.

5. The glass substrate of which the outer periphery portion is unprocessed according to Claim 1, wherein α_s (α_s is a linear thermal expansion coefficient in the range of 0°C to 100°C) is $40 \times 10^{-7}/^\circ\text{C}$ to $130 \times 10^{-7}/^\circ\text{C}$.

6. A glass substrate of which the outer periphery portion is unprocessed, comprising amorphous glass material or crystallized glass material having the following composition: 65 wt.% to 85 wt.% of SiO_2 , 3 wt.% to 15 wt.% of Al_2O_3 , 0 wt.% to 12 wt.% of MgO , 0 wt.% to 10 wt.% of TiO_2 , 3 wt.% to 12 wt.% of Li_2O , 0 wt.% to 10 wt.% of ZnO , 0 wt.% to 5 wt.% of P_2O_5 and 0 wt.% to 10 wt.% of ZrO_2 .

7. A glass substrate of which the outer periphery

portion is unprocessed, comprising amorphous glass material or crystallized glass material having the following composition: 45 wt.% to 60 wt.% of SiO_2 , 12 wt.% to 25 wt.% of Al_2O_3 , 12 wt.% to 25 wt.% of MgO , 0 wt.% to 12 wt.% of TiO_2 , 0 wt.% to 12 wt.% of Li_2O , 0 wt.% to 10 wt.% of ZnO , 0 wt.% to 5 wt.% of P_2O_5 , 0 wt.% to 10 wt.% of ZrO_2 , 0 wt.% to 5 wt.% of Nb_2O_5 , 0 wt.% to 5 wt.% of Ta_2O_5 and 0 wt.% to 5 wt.% of Y_2O_3 .

8. A glass substrate of which the outer periphery portion is unprocessed, comprising amorphous glass material having the following composition: 50 wt.% to 69 wt.% of SiO_2 , 0 wt.% to 15 wt.% of B_2O_3 , 4 wt.% to 25 wt.% of Al_2O_3 , 2 wt.% to 7 wt.% of Li_2O , 0 wt.% to 14 wt.% of Na_2O , 0 wt.% to 18 wt.% of K_2O , 0 wt.% to 6 wt.% of CaO , 0 wt.% to 3 wt.% of Ta_2O_5 , 0 wt.% to 6 wt.% of BaO , 0 wt.% to 6 wt.% of MgO , 0 wt.% to 6 wt.% of SrO , 0 wt.% to 6 wt.% of ZnO .

9. A manufacturing method for a glass substrate of which the outer periphery portion is unprocessed, characterized in that a first lapping process, a second lapping process, a polishing process and a washing process are carried out after a press molding process is carried out so as to compress glass between an upper mold and a lower mold without regulating the edge surface of the outer periphery portion of the glass and, then, a crystallization process or an annealing process is carried out.

10. A manufacturing method for a glass substrate of which the outer periphery portion is unprocessed, characterized in that a center of gravity coring process

wherein a center hole is created using the center of gravity as the center of the hole is carried out and a first lapping process, a precision inner periphery edge surface process, an inner periphery edge surface polishing process, a second lapping process, a polishing process and a washing process are carried out after a press molding process is carried out so as to compress glass between an upper mold and a lower mold without regulating the edge surface of the outer periphery portion of the glass and, then, a crystallization process or an annealing process is carried out.